v of mean concentrations of constituents in the Fall River aquifer of the Invan Kara

		TDS (mg/L)	Sulfate (mg/L)	Fe (mg/L)	Mn (mg/L)	Gross Alpha pCi/L	Ra-226 pCi/L	Radon pCi/L	Uranium (mg/L)
Well ID	In ore zone? Y/N	SMCL 500	SMCL 250	SMCL 0.3	SMCL 0.05	MCL 15	MCL 5	Proposed MCL 300 Alternative MCL 4000	MCL 0.03
5	N	2250	1443	ND	0.06	9	1	926	0.002
7	N	990	559	ND	0.03	9	1	300	ND
8	N	975	526	ND	0.09	6	1	322	0.0002
18	N	960	511	ND	0.06	26	3	1034	0.01
628	Υ	1250	708	0.04	0.10	54	11	4047	0.003
631	?	1975	1240	0.45	0.30	80	16	4190	0.003
681	Υ	908	483	ND	0.09	1502	380	278030	0.01
688	N	774	425	0.03	0.04	14	2	405	ND
694	N	910	485	0.04	0.06	10	1	277	ND
695	N	925	492	0.02	0.08	28	5	1789	0.003
698	Υ	2183	1370	2.6	2.4 ²	1505	388	33633	0.11
706	N	1200	677	ND	0.5	30	3	337	0.01

SMCL – Secondary Maximum Contaminant Level MCL-Maximum Contaminant Level Parea has not been drilled for uranium exploration

Well completed in ore Concentration above standards
Well located inside Project Boundary

Radon above proposed MCL Radon above Alternative MCL
Well located outside Project Boundary

Commented [LP1]: I'd like to confer with Everett about creating another table comparing contaminant concentrations to CWA water quality standards for agricultural and stock uses. For example, even though the SDWA doesn't to my knowledge protect non-human drinking water uses, I'd like to figure out if the levels of contaminations in this groundwater is considered safe for agricultural and stock uses under the CWA. If that comparison is possible. Everett is out all this week, but I plan to talk with him when he returns.

Commented [LP2]: Am I correct gross alpha and Ra-226 are both radioactive? What are the health effects from drinking more than the MCL for gross alpha and Ra-226? To a layperson like myself, it sounds quite dangerous because they're radioactive, but I don't know the science behind it.

Commented [LP3]: Could you help me understand the "?" wells? Are these wells at precise locations or general areas? It looks like they're completed wells at precise locations, but I'm not sure I understand. Are they within the project area, and are they also within the ore zone?

Commented [RV4R3]: ? means the well is probably in a U ore deposit, but the well is located outside the project boundary and hasn't had any exploratory drillholes

² Above the EPA Region 8 Health-Based Standard for manganese of 0.8 mg/L

 $^{^1\,[\,\,} HYPERLINK\,\,"https://www.epa.gov/sites/production/files/2018-03/documents/dwtable2018.pdf"\,\,]$

Table 2. Summary of mean concent	trations of constituents in the Chils	on aquifer of the Invan K	ara within the Project Area boundary

		TDS (mg/L)	Sulfate (mg/L)	Fe (mg/L)	Mn (mg/L)	Gross Alpha pCi/L	Ra-226 pCi/L	Radon pCi/L	Uranium (mg/L)
Well ID	In ore zone? Y/N	SMCL 500	SMCL 250	SMCL 0.3	SMCL 0.05	MCL 15	MCL 5	Proposed MCL 300 Alternative MCL 4000	MCL 0.03
2	N	1100	595	ND	80.0	6	1	731	ND
13	N	878	482	ND	0.15	10	2	328	ND
16	Y	814	450	ND	0.13	60	18	17860	0.001
42	Υ	950	494	ND	0.08	478	97	180750	0.024
615	N	708	396	0.4	0.07	20	2	1583	0.003
619	Υ	2025	1290	3.2	1.5 ²	386	107	4780	0.002
622	N	900	492	0.02	0.18	149	3	1063	0.004
650	N	1575	987	3.5	1.3 ¹	6	2	197	0.0006
680	γ	2293	1351	0.2	0.45	4991	1289	105836	0.034
689	Y	721	389	ND	0.04	39	6	1901	0.004
696	N	983	513	0.02	0.15	13	2	339	0.001
697	N	830	451	0.03	0.05	10	2	336	ND
705	N	941	531	0.02	0.04	4	2	224	0.0002
3026	?	2358	1509	6 ³	1.03 ²	54	6	463	0.012
7002	?	1875	1075	0.2	0.39	52	8	987	0.0006

_ – Secondary Maximum				?-area has no	ot been drilled for uranium exploration
Well completed in ore	Concentration	above standards	Radon above	proposed MCL	Radon above Alternative MCL
Well completed in ore Well located inside Proje	ect Boundary		Well located o	outside Project	Boundary

²Above the EPA Region 8 Health-Based Standard for manganese of 0.8 mg/L.

Commented [LP5]: Is this accurate? I think we need to outline the lateral extent of these wells. If they're all within the Project Area, as I think is correct, it'd be helpful to say that.

Commented [RV6R5]: No, some wells are located outside.

I color-coded wells inside & outside the Project Area Boundary.

I added Table 3 listing well locations.

³ Above the EPA Region 8 Health-Based Standard for iron of 5 mg/L.

Table 3. Well Locations

Well IDs	Aquifer of completion	Location	Inside Project Boundary?
5	Fall River	NENW Section 14 T7S R1E	Υ
7	Fall River	NWNW Section 23 T7S R1E	N
8	Fall River	NWSE Sec 23 T7S R1E	N
18	Fall River	SWSW Section 9 T7S R1E	N
628	Fall River	SESE Section 20 T6S R1E	Υ
631	Fall River	NWNW Section 26 T6S R1E	N
681	Fall River	NENW Section 32 T6S S1E	Υ
688	Fall River	NESW Section 11 T7S R1E	Υ
694	Fall River	NWNW Section 15 T7S R1E	Υ
695	Fall River	SESE Section 32 T6S T1E	Υ
698	Fall River	NESW Section 2 T7S R1E	Υ
706	Fall River	NENE Section 21 T6S R1E	N
2	Chilson	SESE Section 16 T7S R1E	N
13	Chilson	NWNW Section 3 T7S R1E	Υ
16	Chilson	NWSE Section 1 T7S R1E	Υ
42	Chilson	SWNE Section 5 T7S R1E	Υ
615	Chilson	NWNE Section 20 T6S R1E	N
619	Chilson	NWNW Section 2 T7S R1E	Υ
622	Chilson	NENE Section 20 T6S R1E	Υ
650	Chilson	SESE Section 1 T7S R1E	Υ
680	Chilson	NESW Section 11 T7S R1E	Υ
689	Chilson	NENW Section 32 T6S R1E	Υ
696	Chilson	NWNW Section 15 T7S R1E	Υ
697	Chilson	SESE Section 32 T6S R1E	Υ
705	Chilson	NENE Section 21 T6S R1E	N
3026	Chilson	SESE Section 1 T7S R1E	Υ
7002	Chilson	T7S R1E NWNW Section 23	N